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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,317	10/25/2000	Hiroshi Yamada	Q59785	1183

7590

07/17/2002

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EXAMINER
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HARLAN, ROBERT D

ART UNIT	PAPER NUMBER
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1713

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DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/695,317

Applicant(s)

YAMADA ET AL.

Examiner

Robert D. Harlan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

1. Claim 1 is objected to because of the following informalities: In Claim 1, line 2, the Applicant states, "a rubber component selected from at least one of . . ." The claim express alternative limitation and should be written in a proper Markush format. Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being 'selected from the group consisting of A, B and C' or wherein the group is A, B or C. See Ex parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925). The Applicant should insert --the group consisting of-- after "selected from." Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof

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by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Hojo et al., U.S. Patent No. 6,380,288 (hereinafter "Hojo"). Hojo discloses a rubber composition prepared by compounding 0.05 to 20 parts by weight of a hydrazide compound and rubber selected from the group consisting of natural rubber and synthetic rubber (i.e. polybutadiene). See Hojo, Abstract; col. 2, line 15 through col. 5, line 48; col. 17, lines 14-45. Hojo further teaches that the rubber compositions are useful as tire tread. See Hojo, col. 4, lines 60-67. Hojo specifically teaches the use of 3-hydroxy-N'-(1,3-dimethylbutylidene)-2-naphthohydrazide in the rubber composition. See Hojo, Example 10. Hojo further teaches the use of HAF grade

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carbon black as reinforcing filler. See Hojo, Table 1.

Although Hojo does not disclose all the properties of the carbon black delineated in the claimed invention, the present specification explicitly states that "carbon blacks of HAF grade to SAF grade that satisfy the various conditions described above can be preferably used in the present invention." The properties ranges of the carbon black used in the present invention are inherent in the HAF grade carbon black disclosed in Hojo. Therefore, Hojo anticipates claims 1-14.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

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art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al., JP Application No. 09-111839 (hereinafter "Suzuki") in view of Etho et al., EP 0 478 274 A1 (hereinafter "Etho"). Suzuki discloses carbon black for tire treads. See Suzuki, Abstract. In the working examples, Suzuki further discloses carbon black with the following property ranges:

- a. N<sub>2</sub>SA: 146-204 m<sup>2</sup>/g
- b. IA: 140-212 mg/g
- c. CTAB: 122-162 mg/g
- d. N<sub>2</sub>SA/IA: 0.886-1.032 m<sup>2</sup>/g

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e. DBP: 107-163 ml/100g

f.  $D_{50}/D_{st}$ : 0.793-1.133.

Suzuki differs from the present invention in that Suzuki does not disclose the use of hydrazides.

9. Etoh discloses, in analogous art, a rubber composition with reinforcing filler and hydrazide used in tire tread. See Etoh, page 4, lines 18-39. In view of Etoh, one having an ordinary skill in the art would be motivated to modify Suzuki by using a hydrazide in the rubber composition. Such modification would be obvious because one would expect that the use of rubber composition as taught by Suzuki would be similarly useful and applicable to the rubber compositions taught in Etoh.

Furthermore, the references Etoh and Suzuki are both dedicate to the same goal: develop rubber compositions for tire treads, which provides low fuel composition and improved war resistance. Thus, Etoh in view of Suzuki holds claims 1-12 and 14 unpatentable.

### **Conclusion**

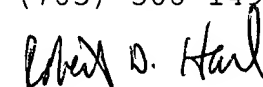
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert D.

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Harlan whose telephone number is (703) 306-5926. The examiner can normally be reached on Mon-Fri, 10 AM - 8 PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9559 for regular communications and (703) 872-9559 for After Final communications.

12. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1495.

  
Robert D. Harlan  
Examiner  
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rdh  
July 12, 2002